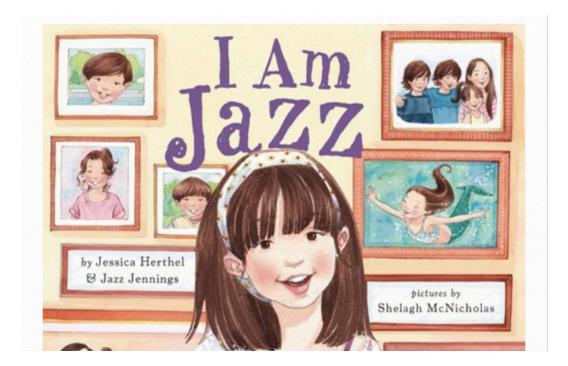
Exhibit 9



Gender Dysphoria and Children: An Endocrinologist's Evaluation of I am Jazz

April 5, 2018 | By Michael K. Laidlaw

I Am Jazz contains both false information and very troubling omissions. Children who are experiencing gender dysphoria will likely be harmed by this book, as will children who do not have the condition.



Recently, a group of parents asked me to review the book *I Am Jazz* to determine whether, from a medical point of view, it is suitable for children to read. They also asked this for the benefit of their school district, given that the topic of childhood gender dysphoria would be discussed at their upcoming school board meeting.

I have read the book *I Am Jazz* and examined the book's relationship to childhood gender dysphoria and its implications for adolescence and adulthood. I am a board-certified physician in Rocklin, California specializing in Endocrinology, Diabetes, and Metabolism. Broadly, endocrinology is the study of hormones and glands and the

Privacy - Terms

diagnosis and treatment of diseases involving these hormones and glands. The following essay is a detailed presentation of my findings regarding this important topic.

Introduction

Children with gender dysphoria deserve our compassion and deserve to be treated with dignity and kindness, just like all other children. Their unique condition makes integrating in the school a challenge. Particularly when dealing with bathrooms and locker rooms, it would be advantageous for schools to have a comprehensive policy to address children with gender dysphoria.

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To some degree, children who share a class with a gender-dysphoric child will need to be educated about what that means and how to address that situation. This should be done by parents and guardians primarily, but ideally in cooperation with teachers and staff.

Unfortunately, *I Am Jazz* actually works against educating children about gender dysphoria. In this essay, I use the book *I Am Jazz* and the TLC show of the same name to help illustrate medical facts about childhood gender dysphoria and adult transgenderism. I believe that if we know the facts about this condition, we will be much more compassionate and understanding toward people with this condition. This will also help in dealing with the parents of children without gender dysphoria who have to explain to their children how to cope with this condition.

The book *I Am Jazz*, by Jazz Jennings and Jessica Herthel, contains a number of factual inaccuracies and very significant omissions. I am very concerned that children or even adults who read these books will be given false ideas about transgenderism. This will lead to the harm of children, as has already happened at Rocklin Academy.

For context, I would highly recommend watching and listening to the *I Am Jazz* book being read by Jazz Jennings, which is available freely on Youtube. Throughout this essay, for the sake of clarity, I use the pronouns of Jazz's biological sex.

Factual Inaccuracies in *I Am Jazz*

Inaccuracy #1: About a quarter of the way through *I Am Jazz*, the author states: "I have a girl brain in a boy body." Jazz later goes to the doctor and relates: "Afterwards, the doctor spoke to my parents and I heard the word 'transgender' for the very first time."

The Facts: The book is written in a way to make you believe that Jazz was diagnosed as transgender. But this is not a diagnosis. The medical diagnosis is gender dysphoria. A biological male feeling and believing himself to be a girl and the distress that accompanies these feelings and beliefs is an example of gender dysphoria (previously known as gender identity disorder). Gender dysphoria is never mentioned in the book.

As a younger child, when Jazz went to see this doctor, he actually had the condition of gender dysphoria. He was not transgender at that point in time. In fact, most children who suffer from gender dysphoria will no longer experience it by the time they become adults. In other words, about 90 percent of biologically male children who believe they are female as young children, when allowed to go through normal puberty and enter adulthood as men, will identify as biological males.

Even the 2017 Endocrine Clinical Practice Guidelines for gender transition state flatly: "With current knowledge, we cannot predict the psychosexual outcome [whether or not a person eventually identifies as transgender] for any specific child."

This is not to say that the dysphoria is not a real condition for Jazz. It certainly has been, and that is very troubling for numerous reasons, not the least of which is the high prevalence of psychiatric conditions that may accompany gender dysphoria, such as depression, which Jazz also suffers from. This is discussed further below.

Inaccuracy #2: According to Jazz, "I have a girl brain but a boy body. This is called transgender. I was born this way!"

The Facts: The "born this way" narrative contradicts known medical facts involving twin studies. Gender identity has been defined as the innate sense that one feels one is male or female (or some combination of the two).

If gender identity is determined only by genes, then we would expect that identical twins would profess having the same gender identity nearly 100 percent of the time. This is not the case. In fact, the largest transexual twin study ever conducted included seventy-four pairs of identical twins. They were studied to determine in how many cases both twins would grow up to identify as transgender. In only twenty-one of the seventy-four pairs (28 percent) did both identical twins identify as transgender. This is consistent with the fact that multiple factors play a role in determining gender identity, including psychological and social factors. This study in fact shows that those factors are more important than any potential genetic contribution. Furthermore, no genetic studies have ever identified a transgender gene or genes.

Inaccuracy #3: Jazz says: "I have a girl brain."

The Facts: As to Jazz having a "girl brain," consider, what does the brain comprise? There are billions of neurons that make up this magnificent structure. Neurons are very specialized cells that transmit and store information. The control center, if you will, of every cell in the body is the nucleus, which contains DNA. The DNA is wound up into specialized units called chromosomes. There are 46 chromosomes in every human cell. Two of these are specialized chromosomes called sex chromosomes. Assuming normal development, females have two X chromosomes, and males have one X and one Y chromosome. These sex chromosomes are present in every cell in the body. They remain in the cells from conception until death and do not change.

It follows from this that since Jazz is male, every cell of his brain has an X and a Y chromosome (whereas a girl brain would have two X chromosomes). Therefore Jazz in fact has a "boy brain" right down to the very level of the DNA.

There is further development of the male body at 8 weeks' gestation within the womb. At this point testosterone is involved in a very intricate process that changes tissues in the pelvis into male genitalia. And we know from the "I am Jazz" show that Jazz has male genitalia. Since the hormone testosterone is carried by the bloodstream throughout the whole body—including the pelvic region as well as the brain—we know that Jazz's brain was also filled with testosterone for development at that time.

This is further evidence that Jazz does not in fact have a "girl brain." He has a boy brain. It is his mind that is giving him the trouble. This is a psychological condition, rather than a biological one.

The authors of the book present false information to children and parents. Kids with gender dysphoria are not born that way. Jazz was born with a male brain that has not changed physically into a female brain. There are numerous psychological and social factors that account for the condition of gender dysphoria in children, some of which are discussed below.

Troubling Omissions

I Am Jazz contains a large number of glaring and very troubling omissions.

Omission #1: The authors fail to mention that Jazz suffers from depression.

At least 70 percent of people with gender dysphoria suffer from mental illness currently or in their lifetime. The most common comorbid mental illnesses include depression, anxiety, bipolar disorder, and dissociative disorder. Jazz has depression, as he has discussed on the TLC program *I Am Jazz*.

Sadly, many people who identify as transgender never find out until it is too late that their gender dysphoria is actually closely tied in with a mental health condition. Walt Heyer is an author who has journeyed from male to female and back to male again. He had surgical and hormonal therapy to become "Laura" and lived that way for many years.

The first physician he saw for this condition sadly never looked further into his psychiatric conditions. Walt was eventually diagnosed with dissociative disorder. He also had problems with substance abuse and was abused as a child. In other words, numerous psychological and social factors contributed to his gender dysphoria. Had these been seriously investigated and treated by his physicians, there is a good chance he could have avoided his life-changing genital surgery.

Omission #2: The suicide rate of transgender individuals is alarmingly high.

Ninety percent of suicides are associated with a psychiatric condition. The risk of suicide coincides of course with the high prevalence of mental illness in this group of people. Depression, for example, is present in at least 50 percent of those who commit suicides.

The American public has been led to believe that the primary cause of transgender suicide is bullying and mistreatment by society. The facts are quite different.

A landmark government study in sexually liberal Sweden showed that people who identify as transgender have about eight times the risk of attempting suicide above the general population. Their risk of death by suicide is nineteen times higher. And the risk does not decline after surgery and hormonal therapy. Although the study was designed to simply analyze patients in their government database and not to study the effects of treatment, people who have had sex reassignment procedures remain at high risk for suicide both before and after therapy.

It seems that many people with gender dysphoria are being given surgical and hormonal treatment for a psychological condition or conditions.

Radical political activists apparently do not want the truth to be known about the association of transgender suicide with mental illness. If we care about people who identify as transgender, we must bring these facts to light.

Omission #3: Jazz is currently being given hormone blockers to stop him from going through normal pubertal development. These powerful hormones arrest the normal development of boys into fully developed men and of girls into fully developed women. In other words, Jazz is now a teenager who has not been allowed to go through puberty.

Many physicians and therapists from across the political spectrum are critical of affirming children as transgender and of the use of puberty blockers. This includes organizations such as the "left-leaning, open-minded, and pro-gay rights" group youthtranscriticalprofessionals.org and the right leaning American College of Pediatricians.

By current protocol, children with gender dysphoria are given these powerful hormones at around age eleven. This is too young for them to understand the implications of what will happen to their minds and bodies. Time is required for maturity of the developing adolescent mind, and hormones play an important role in this development. For Jazz, allowing normal production of testosterone would further the development of his adolescent brain and very likely lead him to different conclusions regarding his gender.

Again, in some 90 percent of children with gender dysphoria, the condition will have resolved by the time of going through normal pubertal development.

Warning: Omission #4 contains a graphic description of transgender surgery.

Omission #4: Jazz will need to have his child-sized penis surgically destroyed to create a false vagina.

What type of surgical procedure(s) is Jazz considering for the treatment of gender dysphoria? Typically, surgery turning a male into a trans-female involves dissecting the penis, turning the skin inside out, and placing it into a surgically created cavity to create a false vagina. After surgery, a dilator has to be placed in this artificial vagina to keep it from collapsing.

But Jazz has a problem. Since he still has a small child-sized penis (because of puberty blockers), he does not have enough skin to line the false vagina. Potential remedies include sewing in a section of intestine along with the penis skin to make the false vagina. In one episode, Jazz is actually offered two different surgeries: one surgery to create the false vagina and a second surgery two months later to attempt to form the labia. The need for two dangerous surgeries instead of one is directly related to the effects of puberty blockers.

Omission #5: Jazz currently suffers from sexual dysfunction and will likely have permanent damage.

The effects of puberty-blocking agents (started in early adolescent development) on long-term sexual function seem to be largely unstudied. However, from interviews with Jazz's surgeons, one can deduce the almost certain loss of sexual function. Or more accurately, the sexual development of the genitalia has not been allowed to occur in Jazz and never will occur under the current circumstances.

There are five pubertal development stages, which are known as Tanner Stages. They go from 1 (no development, prepuberty) to 5 (full adult development). This is what a pediatrician would use to determine the level of a child's development.

Current guidelines recommend starting puberty blockers at Tanner stage 2 (sparse pubic hairs, minimal testicular growth). This will reduce testosterone to very low levels. Because of this, Jazz's male genitalia are "locked in" at Tanner stage 2. There is by definition "no enlargement of the penis" to that point. That accounts for Jazz's child-size penis and the problems with surgery discussed earlier.

In an episode where Jazz visits a surgeon and has a discussion about sexual function, Jazz states: "I haven't experienced any sexual sensation." Regarding orgasm, Jazz says: "I don't know, I haven't experienced it." The male genitalia are awaiting testosterone

to change from a pre-pubescent state to an adult state in which sexual function is possible.

In the normal adult state, there is full sexual function. In one episode, Jazz's pediatric endocrinologist states that Jazz has adult female levels of estrogen. This, however, has not given Jazz "any sexual sensation." This makes sense physiologically, as the male genitalia (penis, scrotum, testicles, etc.) are awaiting testosterone to develop, not estrogen.

Because of this, for adolescent males similar to Jazz who are receiving puberty blockers, I can see little to no sexual function occurring either now or into adulthood. They will not achieve even the equivalent sexual function of, say, an adult male who has gone through hormone treatment and sex reassignment surgery as an adult.

Omission #6: Jazz will very likely be rendered permanently infertile.

Again, because of puberty blockers, Jazz's male genitalia are stuck at Tanner stage 2. The estrogen he is receiving will allow for breast development to the level of an adult female. However, his testicles are unable to produce sperm capable of fertilizing an ovum. In fact, it is not even possible to store sperm for use in future fertility, because it has never been given the opportunity to develop within Jazz's testicles.

Once he has surgery to remove his testicles, Jazz will be forever infertile, with no chance to produce biological offspring.

Is this a decision that any adolescent child has the maturity and insight to make? I do not believe so. This is another reason that the use of puberty blocking agents in adolescents is highly unethical.

Omission #7: There is a high level of substance abuse among people who identify as transgender.

Fortunately, Jazz does not appear to use alcohol or other substances. Even when his family inexplicably takes him to a "drag queen" club for his sixteenth birthday, Jazz does not consume alcohol.

Studies show that people who identify as transgender are at increased risk of drug and alcohol abuse and that LGBT people "enter treatment with more severe substance abuse problems, greater psychopathology, and greater medical service utilization when compared with heterosexual clients." Again, this is understandable

when one considers the degree of mental illness in gender dysphoric individuals. These substances may be used as coping mechanisms. Additionally, some children who grow up to identify as transgender have been physically, emotionally or sexually abused, which again is correlated with substance abuse disorders.

Omission #8: There are a number of serious health risks associated with taking cross-sex hormones.

For biological males to take female hormones, such as estrogen, or biological females to take a male hormone, such as testosterone, is not without considerable health risk, particularly at the doses suggested. Males taking female hormones are at high risk for blood clots, which may be fatal if lodged in the lungs. They are also at increased risk for breast cancer, coronary artery disease, cerebrovascular disease, gallstones, and high levels of the lactation hormone prolactin. Females taking male hormones are at high risk for erythrocytosis (having a higher than normal number of red blood cells). They are also at increased risk for severe liver dysfunction, coronary artery disease, cerebrovascular disease, hypertension and breast or uterine cancer.

Furthermore, the use of puberty-blocking drugs in adolescents has been associated with incomplete mineralization of bone, meaning these children may be at future risk for osteoporosis. There is very little information on the use of these blockers on brain development, but the studies we do have show potential for cognitive impairment.

Omission #9: The mortality rate of those who identify as transgender is three times higher than that of the general population.

This should be a cause for alarm. Much of the increased risk of death has to do with the suicide rate, as detailed above. But the multitude of other health risks just mentioned play a role as well.

Entities such as the FDA demand rigorous studies to be done of medications and devices before they come to market. Many treatments never come to market because of poor study outcomes. Of those treatments that are made available, many are still pulled from the market or receive changes in labeling on account of serious adverse reactions. It is very likely that if such rigorous studies were performed on transgender hormonal therapy and surgery then these therapies would never be approved for use because of the severe health outcomes including death.

Conclusion

Primum non nocere is the Latin phrase for "first, do no harm" and is an admonition to physicians to seriously consider the risks of any treatment before applying it. Given the multitude of health risks, potential infertility, and sexual dysfunction associated with the hormonal and surgical treatment of gender dysphoria, I could not in good conscience recommend these treatments to any child or adolescent.

I Am Jazz contains false information and very troubling omissions. For these reasons, I believe that the book is not appropriate for children of any age to read. Children who are experiencing gender dysphoria will likely be harmed by this book, as will children who do not have the condition.

This harm has already occurred at Rocklin Academy in a kindergarten class where the book was read. A number of children in the class were emotionally harmed. It is unclear to me whether any of the teachers or authority figures at Rocklin Academy have recommended that the male child who dresses as a girl should be evaluated by qualified therapists and counselors for psychosocial factors or mental illness that may be leading to the gender dysphoria. If this has not happened, it should.

It is possible that with proper therapy the child's gender dysphoria could be alleviated. He could then be allowed to regain his masculine identity and therefore not suffer the very troubling life of transgenderism, with all its risks of increased mortality, suicide, mental illness, substance abuse, infertility, and other grave conditions detailed above.

Thank you very much for reading this essay. I hope that it will benefit not only the parents in the community requesting this information, but also the students suffering from gender dysphoria and the families, friends, teachers, and administrators who care for them.